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Senate

ENERGY POLICY ACT OF 2005 (Continued)

Mr. CARPER. Mr. President, I thank the Senator from Arizona for yielding me time. And even more, I express my thanks to him and Senator Lieberman for the leadership they are providing on an enormously important issue for not just our country and our States but, really, I think for the world in which we live.

I want to start off today with something of an admission. I want to admit to all of you that I am really a Johnny-come-lately on the issue of global warming. Not that long ago, I believed we needed more science to be able to justify action; that we needed more research to justify action. Not that long ago, I feared that taking meaningful action could very likely mean that we do harm to our economy.

But with the passage of time, like a lot of our Republican friends and our Democrat friends, I have changed my mind. Over the past several years, I have become a believer. Global warming is real. We do need to do something about it. I have enough faith in American technology and our ingenuity and our know-how to believe we can do that without endangering economic growth.

Two of the key people who have helped to educate me on this issue are Dr. Lonnie Thompson and his wife Ellen Mosely-Thompson. Both are professors at Ohio State University. Just last month, Lonnie

was elected to the National Academy of Sciences. As an undergraduate student and graduate of Ohio State University, I am proud to say I know them, although neither of them was a professor of mine when I was a student there a long time ago.

Doctors Thompson are not retired academics who sit in Columbus, OH, and pontificate about global warming. They get their hands dirty. They have led some 40 expeditions around the world--to the Himalayas, to Mount Kilimanjaro, and to the Andes in South America--in an attempt to figure out how global warming is changing the face of our most famous mountaintops.

According to Lonnie Thompson:

In 1912, there was over 12 square kilometers of ice on Mount Kilimanjaro. When the Thompsons went to that mountain in February of 2000, it was down to about 2 square kilometers of ice. Lonnie Thompson projects sometime around 2015--that is 10 years from now--the ice that sits atop Mount Kilimanjaro will disappear entirely.

From all their studies of glaciers and icecaps atop mountains in Africa and South America, Lonnie and Ellen Thompson have concluded that many of them will simply melt within the next 15 years because of global warming. And their fear is that little can be done to reverse that.

I would like to share with you today several enlarged photos. I will start with one of the icecaps the Thompsons have studied in the Southern Andes. This first one shows what it looked like in 1978--27 years ago and the second shows the same mountain in 2000. This area here may not look like a whole lot, but that is a 12-acre lake that exists today which did not exist in 1978. There is a lot less ice, a lot of melting, and now we have a lake where a glacier once stood.

Now, that may or may not sound like a lot, but consider this: The Thompsons have observed that the rate of retreat has been 32 times greater in the last 3 years than it was in the period between 1963 and 1978. Just think about that; 32 times greater that this glacier has retreated in the past 3 years than it did back in the 1960s and 1970s.

Now, that is the Andes. Let's look at something just a little bit closer to home. Glacier Bay is located along the coast of southeastern Alaska. It is a national park and preserve filled with snow- and ice-covered mountains. A lot of us have been there, visited, and seen them with our own eyes.

This next photo is of the Riggs Glacier in Glacier Bay. It was taken by the U.S. Geological Survey, I believe, in 1941, over 60 years ago.

Now, look at this next picture. It is also the same spot, taken in 2004. There is no ice. The weather warmed up enough that we actually have vegetation. This might be the upside of global warming, but there is a downside as well, and that is what I am going to be focusing on today.

These are just two examples, my friends, and there are plenty more we do not have

time for today. Together I believe they spell out an ever more convincing case that our Earth is warming, and at an increasing rate, and what is more those of us who live on this planet are largely to blame.

I want us to consider some facts as we know them. If we could take a look at this next chart. First of all, 9 out of 10 of the hottest years on record have occurred in the last decade. Arctic sea ice has shrunk by some 250 million acres--an area the size of California, Maryland, and Texas combined. Since 1995, more than 5,400 square miles of ice have broken off of Antarctica and melted.

Skeptics will still try to claim that there is no official link between what we see happening across the globe and manmade greenhouse gases. But last month, scientists at NASA's Goddard Institute for Space Studies announced that they have found the ``smoking gun" in the global warming debate. What they have done is they have used sophisticated computer models and ocean-based measurement equipment. NASA scientists found by doing so that for every square meter of surface area, our planet is absorbing almost 1 watt more of the Sun's energy than it is radiating back into space as heat--a historically large imbalance that these NASA scientists tell us can only be attributed to human actions. Their conclusion:

There can no longer be substantial doubt that human-made gases are the cause of global warming.

Their words, not mine. According to scientists, that imbalance will only get worse over the next century. Computer modeling shows that temperatures may well rise between 2 to as many as 10 degrees Fahrenheit by the end of the 21st century

depending on how well carbon emissions are controlled by us here on this Earth. The effects of our doing nothing could be catastrophic. As the Earth's temperature increases, the extra heat energy in the atmosphere likely will trigger even greater extremes of heat and drought, of storms and wind and rain and even sometimes of more intense cold. The Environmental Protection Agency estimates that unless global warming is controlled, sea levels will rise by as much as 2 feet over the next 50 years. For our island nations and coastlines, that could mean literally entire communities and beaches wiped out.

I like to joke, but it is really gallows humor, that in Delaware our highest point of land is a beach. A sea level rise of that magnitude would mean that people wouldn't be looking for beachfront property at Rehoboth or Dewey Beach. They might be looking for it closer to the State capital in Dover, DE, than any place along the shores we visit.

I also want to quote a Republican friend of mine who recently pledged to cut California's carbon dioxide emissions by more than 80 percent over the next 50 years:

I say, the debate is over. We know the science. We see the threat, and we know the time for action is now.

I want to ask, what does the chief executive of California know that the chief executive of our country may not yet know? Our country is the largest emitter of greenhouse gases. The Governor knows that. He knows we account for almost 20 percent of the world's manmade greenhouse emissions. He also knows we account for about one-quarter of the world's economic output. The bottom line is, the United States has a responsibility to lead on this issue.

The United States has a responsibility to lead on this issue. Unfortunately, we have not seen a whole lot of leadership coming from the White House or Congress on global warming--at least not yet. The McCain-Lieberman proposal before us is not Kyoto. It calls for more realistic timeframes for CO2 reductions and more flexibility for businesses to meet them. In my opinion, the time has come for action. That is not just my opinion that is an opinion shared by a growing number of American businesses as well. They see the future. They are telling us to act now rather than later.

In the face of overwhelming scientific evidence, most naysayers have moved away from questioning whether climate change is real. They have now pinned their excuse for inaction on the adverse effects carbon constraints would have on the economy. However, some forward-thinking businesses are starting to realize that doing something proactive on global warming represents an opportunity to enhance their bottom line.

More American businesses are coming to realize that controls on carbon dioxide emissions are probably inevitable. They are saying it makes sense to take small steps now to avoid bigger problems later. A growing number of those companies have concluded that if we act to address climate change now, we can actually help them and their bottom line.

Let me give a couple examples. Companies realize they can make money by being green. Last month, for example, GE chief executive Jeffrey Immelt said his company is prepared to support mandatory limits on CO2 while simultaneously moving forward to double revenues from environmentally friendly technologies and products to \$20 billion within 5 years. Here is what Mr. Immelt said:

We believe we can help improve the environment and make money doing it..... we see that green is green.

In addition, more shareholders these days are demanding green portfolios. Evangelical and environmental groups as well as State pension fund officials, who together control more than \$3 trillion in assets, get it. They are pushing resolutions at shareholder meetings that will compel companies to disclose their financial exposure to future global warming regulations. Their pressure has resulted in many companies developing global warming policies in order to decrease future liabilities and show a greener, more environmentally friendly portfolio.

There is also more pressure among corporate peers to prove their environmental stewardship. JPMorgan recently announced that it would ask clients that are large emitters of greenhouse gases to develop carbon reduction plans. Similar commitments were made earlier by Citigroup and Bank of America.

Other companies, such as DuPont, a major global manufacturer headquartered in Delaware, have already begun taking meaningful steps to reduce their carbon dioxide emissions. In the mid-1990s, DuPont began aggressively maximizing energy efficiency as part of a global climate change initiative. This strategy allowed DuPont to hold their energy use flat while increasing production. Their efforts have reduced their greenhouse gas emissions by more than 60 percent and saved this company \$2 billion. Chad Holiday, CEO of the company, said:

As a company, DuPont believes action is warranted, not further debate. We also believe that the best approach is for business

to lead, not to wait for public outcry or government mandates.

I, too, believe the time has come to act. I also believe that given the right initiatives, even more American companies will rise to the challenge.

As businesses such as DuPont and GE have begun taking steps to address climate change, more and more States and cities are moving to do the same. Just this month, the U.S. Conference of Mayors unanimously passed a resolution calling on their 1,183 cities to try to meet or surpass emissions standards set by the Kyoto Protocol. Nineteen States have developed renewable portfolio standards in an effort to encourage more energy to be derived from cleaner and less carbon producing sources.

There is good news and bad news in all this. On the one hand, you have all these cities and States taking their own course. While that is encouraging, on the other hand, for businesses that need some certainty and a national game plan, there is a problem with that. We don't need a patchwork quilt. What we need is the Federal Government to provide some leadership and certainty for our businesses.

On Social Security, the President says we are going to have a big problem 20, 30, 40 years down the road. And in order to avoid a big problem, a big train wreck, we need to take some small steps now. Frankly, the same argument applies to global warming. Thirty, 40, 50 years down the road, we are going to have a huge problem. It could be averted if we take some small, measured, reasonable steps today. The sooner we get started, the better off we will be and the less likely that a train wreck will occur 30 or 40 years later in this century.

I yield back my time, and I thank my colleagues for their leadership and for the extra time.